𝔅𝔬𝔰𝔱𝔬𝔫 ℭ𝔬𝔩𝔩𝔢𝔤𝔢 𝔅𝔲𝔩𝔩𝔢𝔱𝔦𝔫

GRADUATE SCHOOL

Announcements

1948 – 1949

University Heights

Chestnut Hill 67, Massachusetts

Boston College Bulletin

GRADUATE SCHOOL

1948 — 1949

Boston College

CHESTNUT HILL 67, MASSACHUSETTS

TABLE OF CONTENTS

CALENDAR

1948 — 1949

1948

Sept.   15-18   Registration at Boston College, Chestnut Hill:
2:00-5:00 P. M., Sept. 15-17.
9:00-12:00 A. M., Sept. 18.

A late registration fee of three dollars will be required of all students without exception who register after the time assigned.

Sept.   20-25   Opening of classes at Chestnut Hill.

Oct.   12   Columbus Day—No classes.

Nov.   1   Feast of All Saints—No classes.

Nov.   11   Armistice Day—No classes.

Nov.   25   Thanksgiving Day—No classes.

Dec.   8   Feast of the Immaculate Conception—No classes.

Dec.   11   Examination for fulfillment of the modern language
requirement.

Dec.   18   Christmas holidays begin at the close of classes.

1949

Jan.   3   Classes resumed.

Jan.   10   Last day for filing outlines of theses for degrees to
be conferred in June.

Jan.   10-22   Mid year examinations.

Jan.   20-22   Registration for the second semester.

Jan.   24-29   Opening of classes for the second semester.

Feb.   22   Washington's Birthday—No classes.

Apr.   9   Examination for fulfillment of the modern language
requirement.

Apr.   13   Easter holidays begin at the close of classes.

Apr.   25   Classes resumed.

May   9   Bound copies of theses due.

May   9-21   Final examinations.

June   8   Commencement.

BOSTON COLLEGE

THE UNIVERSITY COUNCIL

1948 - 1949

WILLIAM L. KELEHER, S.J., A.M., M.S., S.T.L., *President*
University Heights

The College of Arts and Sciences   University Heights
    Ernest B. Foley, S.J., A.M., *Dean*
    John P. Foley, S.J., A.M., S.T.L., *Dean of Freshmen*

The Graduate School of Arts and Sciences   University Heights
    George A. O'Donnell, S.J., A.M., Ph.D., *Dean*

The School of Business Administration   University Heights
    James J. Kelley, S.J., A.M., *Dean*

The College of Arts and Sciences Intown   Boston, Massachusetts
    John W. Ryan, S.J., A.M., *Dean*

The Summer School   University Heights
    James L. Burke, S.J., A.M., Ph.D., *Director*

The Law School   Boston, Massachusetts
    William J. Kenealy, S.J., A.M., Ph.D., S.T.L., *Dean*

The School of Social Work   Boston, Massachusetts
    James D. Sullivan, S.J., A.M., *Regent*
    Dorothy L. Book, A.B., *Dean*

The Institute of Adult Education   Boston, Massachusetts
    John W. Ryan, S.J., A.M., *Director*

The School of Nursing   Boston, Massachusetts
    Anthony G. Carroll, S.J., A.M., M.S., *Regent*
    Mary A. Maher, R.N., B.S., *Dean*

The College of Liberal Arts in Lenox   Lenox, Massachusetts
    William F. Finneran, S.J., A.M., *Rector*
    William J. Murphy, S.J., A.M., Ph.D., *Dean*

The School of Philosophy and Science   Weston, Massachusetts
    Henry T. Martin, S.J., A.M., S.T.D., *Rector*
    Joseph F. MacDonnell, S.J., A.M., Ph.D., *Dean*

The School of Theology   Weston, Massachusetts
    Henry T. Martin, S.J., A.M., S.T.D., *Rector*
    John P. Haran, S.J., A.M., S.T.D., *Dean*

ADMINISTRATIVE OFFICERS

REV. WILLIAM L. KELEHER, S.J., A.M., M.S., S.T.L., *President*

REV. GEORGE A. O'DONNELL, S.J., A.M., Ph.D., *Dean*

MARY E. McINERNEY, LL.B.,, *Registrar*

REV. STEPHEN A. SHEA, S.J., A.B., A.M., *Treasurer*

REV. TERENCE L. CONNOLLY, S.J., A.M., Ph.D., *Librarian*

BOARD OF GRADUATE STUDIES

REV. WILLIAM L. KELEHER, S.J., A.M., M.S. S.T.L.

REV. GEORGE A. O'DONNELL, S.J., A.M., PH.D.

REV. JAMES L. BURKE, S.J., A.M., PH.D.

REV. CHARLES F. DONOVAN, S.J., A.M., PH.D.

REV. WILLIAM L. JOHNSON, S.J., A.M.

REV. LEO P. McCAULEY, S.J., A.M., PH.D.

REV. ALBERT F. McGUINN, S.J., M.S., A.M., PH.D.

REV. JOHN A. O'BRIEN, S.J., A.M., PH.D.

REV. JOHN C. O'CONNELL, S.J., A.M., S.T.D., PH.D.

REV. JOHN A. TOBIN, S.J., A.M., PH.D.

FACULTY

REV. CAROL L. BERNHARDT, S.J. *English*
  A.B., A.M., Woodstock College; Ph.D., Gregorian University.

REV. JAMES L. BURKE, S. J. *Chairman,*
  Department of History and Government
  A.B., A.M., Boston College; S.T.L., Weston College; Ph.D., Harvard University.

REV. JAMES E. COLERAN, S.J. *Religion*
  A.B., A.M., Boston College; S.T.L., Weston College; S.S.L., Biblical Institute.

REV. JOHN J. COLLINS, S.J. *Religion*
  A.B., Boston College; A.M., Gonzaga University; S.T.L., Weston College; S.S.L., Biblical Institute.

JOHN R. COX   *History*
    A.B., Ph.D., University of California.

WYLMA R. CURTIN   *Education*
    A.B., Trinity College; A.M., Ph.D., Catholic University.

RALPH K. CARLETON   *Chemistry*
    B.S., Boston University; A.M., Harvard University; Ph.D., Vanderbilt Univ.

ANDRE J. DE BÉTHUNE   *Chemistry*
    B.S., St. Peter's College; Ph.D., Columbia University.

REV. JAMES J. DEVLIN, S.J.   *Physics*
    A.B., M.S., Boston College.

REV. JOHN F. DOHERTY, S.J.   *Education*
    A.B., A.M., Woodstock College; Ph.D., Gregorian University.

REV. CHARLES F. DONOVAN, S.J., *Chairman, Department of Education*
    A.B., M.Ed., Boston College; A.M., Fordham University; Ph.D., Yale University.

RICHARD E. DOWNING   *Physics*
    B.S., Massachusetts Institute of Technology; M.S., Ohio State University.

REV. ALEXANDER G. DUNCAN, S.J.   *Philosophy*
    A.B., A.M., Boston College; S.T.L., Weston College.

REV. EDWARD H. FINNEGAN, S.J.   *History*
    A.B., A.M., Boston College; S.T.L., Weston College; Ph.D., Fordham University.

REV. THOMAS F. FLEMING, S.J.   *Government*
    A.B., A.M., Boston College; A.M., Columbia University.

REV. JOSEPH D. GAUTHIER, S.J., *Chairman,*
                            Department of Romance Languages
    B.S., Trinity College; A.M., Boston College; D.ès L., Laval University.

WILLIAM J. GRATTAN   *History*
    A.B., College of the Holy Cross; A.M., Cand.Ph.D., Columbia University.

*SAMUEL GLASSTONE   *Chemistry*
    B.S., M.S., Ph.D., Sc.D., University of London.

EDWARD F. GRUSKOWSKI   *Classical Languages*
    A.B., Boston College; A.M., Catholic University.

HELEN M. HEFFERNAN   *Sociology*
    B.S., A.M., Boston College.

EDWARD L. HIRSH   *English*
    A.B., A.M., Ph.D., Yale University.

REV. WILLIAM L. JOHNSON, S.J., *Chairman, Department of English*
    A.B., Boston College; A.M., Woodstock College.

SISTER MARY JOSEPHINA, S.S.J.   *Education*
    B.S., Mt. St. Joseph Teachers College; M.Ed., Boston College.

*On leave of absence, 1948-49.

Rev. Edward J. Keating, S.J. *Philosophy*
 A.B., A.M., Boston College; Ph.D., Gregorian University.

Augustine L. Keefe *Classical Languages*
 A.B., A.M., Boston College.

Rev. George F. Lawlor, S.J. *Biology*
 A.B., Boston College; M.S., St. Louis University.

Paul A. Maginnity *Chemistry*
 B.S., M.S., Ph.D., Rensselaer Polytechnic Institute.

Thomas H. D. Mahoney *History*
 A.B., A.M., Boston College; Ph.D., George Washington University.

Fakhri B. Maluf *Philosophy*
 A.B., American University of Beirut; A.M., Ph.D., University of Michigan.

Rene Marcou *Mathematics*
 B.S., Colby College; Ph.D., Massachusetts Institute of Technology.

Francis L. Maynard *Biology*
 A.B., Boston College; A.M., Brown University.

Rev. John A. McCarthy, S.J. *Philosophy*
 A.B., A.M., Boston College; S.T.L., Weston College.

Timothy McCarthy *Chemistry*
 B.S., Boston College; Ph.D., Georgetown University.

Rev. Leo P. McCauley, S.J., *Chairman,*
       Department of Classical Languages
 A.B., A.M., Boston College; Ph.D., Johns Hopkins University.

Rev. Albert F. McGuinn, S.J., *Chairman,*
        Department of Chemistry
 B.S., Massachusetts State College; M.S., Rutgers University; A.M., Boston College; Ph.D., Fordham University.

Rebecca M. McKeon *Education*
 B.S., Columbia University; M.Ed., Ph.D., Boston University.

Rev. John J. Moriarty, S.J. *Sociology*
 A.B., A.M., Woodstock College; A.M., St. Louis University.

Rev. James F. Moynihan, S.J. *Psychology, Education*
 A.B., College of the Holy Cross; A.M., Boston College; Ph.D., Catholic University.

Rev. John E. Murphy, S.J., *Chairman, Department of Gaelic*
 A.B., A.M., Boston College; Ph.D., National University of Ireland.

Rev. Edward H. Nowlan, S.J. *Education*
 A.B., A.M., Boston College; Ph.D., Harvard University.

Rev. John A. O'Brien, S.J., *Chairman, Department of Philosophy*
 A.B., College of the Holy Cross; A.M., Woodstock College; Ph.D., Gregorian University.

Rev. John A. O'Callaghan, S.J. *English*
 A.B., A.M., Boston College; S.T.L., Weston College; Ph.D., Boston College.

Rev. John C. O'Connell, S.J., *Chairman, Department of Sociology*
A.B., Boston College; A.M., S.T.D., Woodstock College; Ph.D., Harvard University

David C. O'Donnell　　　　　　　　　　*Chemistry*
A.B., Miami University; M.S., Ph.D., Ohio State University.

Rev. George A. O'Donnell, S.J., *Chairman,*
Department of Mathematics
A.B., Boston College; A.M., Woodstock College; Ph.D., St. Louis University.

Francis P. O'Hara　　　　　　　　　　*Romance Languages*
A.B., A.M., Boston College; Ph.D., University of Paris.

William J. O'Keefe　　　　　　　　　　*Education*
A.B., College of the Holy Cross; LL.B., Georgetown University.

Rev. James W. Ring, S.J.　　　　　　　　*Physics*
A.B., M.S., Boston College; S.T.L., Weston College.

Rev. James E. Risk, S.J.　　　　　　　　*Religion*
A.B., A.M., Boston College; S.T.L., Weston College; J.C.D., Gregorian University.

Thomás I. Ryan　　　　　　　　　　　　*Biology*
A.B., M.S., Boston College.

John L. Shork　　　　　　　　　　　　*Physics*
B.S., M.S., Boston College.

Ernest A. Siciliano　　　　　　　　　　*Romance Languages*
A.B., A.M., Boston College; Ph.D., Harvard University.

Bernard J. Sullivan　　　　　　　　　　*Biology*
A.B., Carroll College; M.S., Ph.D., Fordham University.

Rev. Louis E. Sullivan, S.J.　　　　　　*Religion*
A.B., A.M., Woodstock College; S.T.D., Gregorian University.

Rev. John A. Tobin, S.J., *Chairman, Department of Physics*
A.B., A.M., Woodstock College; Ph.D., Gregorian University.

Leon M. Vincent　　　　　　　　　　　*Biology*
Ph.B., M.S., Boston College.

Robert G. Walker　　　　　　　　　　*English*
A.B., Southwestern University; A.M., Ph.D., University of Michigan.

Rev. Michael P. Walsh, S.J., *Chairman, Department of Biology*
A.B., A.M., Boston College; Ph.D., Fordham University.

William A. Welch　　　　　　　　　　*Education*
A.B., A.M., Boston College; LL.B., Suffolk Law School.

Frederick E. White　　　　　　　　　　*Physics*
A.B., M.S., Boston University; Ph.D., Brown University.

Harold A. Zager　　　　　　　　　　　*Mathematics*
B.S., Massachusetts Institute of Technology; M.S., Boston College.

History and Organization

Boston College has, almost since its inception, conferred the degree of Master of Arts for graduate work of not less than one year in residence and on occasions for non-resident work of conspicuous merit. From time to time formal Graduate Courses of instruction leading to the Master's and Doctor's degrees have been established to meet the demands of individuals or groups seeking these higher degrees. The Graduate School in its present form, however, is the outcome of an arrangement made with the Department of Education of the City of Boston in 1920 to provide proper training for men desirous of entering the Boston school system. This arrangement was intended only as a temporary expedient to help relieve the scarcity of men teachers after the World War. It was discontinued in 1925, and the scope of the Graduate School was extended so as to offer graduates of Boston College and similar institutions of men and women an opportunity to continue their education along specialized lines. The Graduate School is administered by the Graduate Board composed of the President of the College, Dean of the Graduate School, and one member from each department in which graduate degrees are given. All courses are given in the College Buildings, Chestnut Hill, Massachusetts.

Admission

Admission to the Graduate School is granted to graduates in Arts, Philosophy, Science or Letters, of Colleges whose degrees are recognized by Boston College. Applicants must present satisfactory evidence of character and qualifications.

All inquiries concerning admission should be addressed to the Registrar. Applicants are advised to secure and file admission blanks as early as possible.

At least two weeks before the dates for formal registration, all new candidates must submit to the Graduate School Office an official transcript of their undergraduate record.

No student is definitely accepted as a candidate for a higher degree until his application has been accepted by the Graduate Board and his credentials have been filed in the office of the Registrar.

Students already enrolled in the School must register personally each year at the Registrar's Office, prior to the commencement of the school year.

Registration

The days assigned for formal registration are Sept. 15 to Sept. 18. Personal interviews may be had with the Dean or with the Registrar at Boston College, Chestnut Hill, on days assigned for registration. During September the office of the School in the Tower Building, Boston College, will be open every day, except Saturdays, from 3:00 to 5:00 in the afternoon.

Fees

Matriculation Fee: New Students	$ 5.00
Old Students	2.00
Late Registration	3.00
Fee for each course per semester hour	12.00
Tuition fee for full-time students	350.00
Laboratory Fee: by arrangement	
Library Fee:	
Students taking 20 or more sem. hrs.	15.00
Students taking 10-19 sem. hrs.	10.00
Students taking less than 10 sem. hrs., per sem. hr. . .	1.00
Late or Special Examination	3.00
Binding fee for theses	9.00
Graduation Fee: For Master's Degree	15.00

Withdrawals and Refunds

A student who withdraws from any course must notify the Dean immediately in writing of his withdrawal. Withdrawal from the course will become effective as of the date on which the Dean receives the notice. This date also applies to refunds.

Special fees are not returnable. Tuition fees are not returnable after the first three weeks of a semester. Students who withdraw during the first three weeks of a semester will receive a pro rata refund.

Information

For information about the Graduate School address the Registrar of the Graduate School, Boston College, Chestnut Hill 67, Mass.

General Regulations

The Graduate School accepts properly qualified candidates for the degree of Master of Arts, Master of Science, and Master of Education.

After admission to the Graduate School, the student must spend at least one full year in residence, pursuing the courses approved by the Dean and the student's adviser. Students who are engaged in outside work which reduces the time and thought they are able to give to study will be required to devote more than the minimum time to their study for the degree.

For the Master's degree, a student must secure a minimum of thirty semester hours of graduate credit in approved courses. To receive graduate credit, a grade of A or B (80-100) must be attained.

The candidate for a graduate degree must at the time of his matriculation, make choice of the department in which he wishes to do his principal or major work. In his choice of a department, the candidate is restricted to the fields of study in which he has had the necessary preparation in his college courses. In addition, the student must satisfy the special prerequisite requirements of his major department.

The entire program of studies which a student offers in fulfillment of the requirements for a degree must be satisfactorily completed within a period of six years from the date when he first registered. Should a candidate for any reason whatsoever fail to receive his degree within the time prescribed, all claim or right to continue working for the degree, or to have any or all of the work already accomplished credited in fulfillment of the requirements for the same degree, is ipso facto forfeited and annulled.

A very important part of the work for a degree is the thesis on some subject in the field of the candidate's major work. Two copies of an outline of the thesis, with the written approval of the professor under whose direction it is to be done, must be furnished to the Dean on the date indicated in the Graduate School calendar. These outlines must be submitted on the forms supplied by the Graduate School office.

No thesis will be accepted for a Master's degree which is confined to the mere compilation of facts derived from the writings of others, nor will merely literary combinations of such information be acceptable. The thesis must show originality in the treatment of the subject chosen. This original treatment must give evidence that the writer of the thesis is capable of opening a new field of investigation, or of

offering such critical opinion that a real advance is made in the study of the subject treated.

In the preparation of the thesis, the candidate must observe the regulations in regard to forms of citation, footnotes, and the like, as set forth in the mimeographed instructions prepared by the Board of Graduate Studies.

Each candidate must furnish two bound typewritten or printed copies of his thesis to the College Library. These copies become the property of the College. The typewritten copies must be on paper of a uniform size of 8 inches by 10½ inches.

Written examinations in the different courses followed are required of the candidate on the completion of each course. A final, comprehensive, oral examination upon all work presented for the degree is also required.

Absence from more than fifteen percent of the lecture or seminar courses renders the candidate ineligible for credits for the course in question.

In the case of absence from a scheduled examination, arrangements to take an examination in the course in question must be made through the Dean's office. A fee of three dollars ($3.00) will be required for such special examination.

The Degree of Master of Arts

In addition to the requirements stated above for the Master's degree, the candidate for the Master of Arts degree must give proof that he possesses the reading knowledge of one modern foreign language.

Students are encouraged to earn all their graduate credits in one field. With the permission of the proper authorities students may earn from eight to twelve of the thirty semester hours in an additional integrated field.

The Degree of Master of Science

Candidates for the degree of Master of Science will be accepted in Biology, Chemistry and Physics.

In addition to the requirements stated above for the Master's degree, the candidate for the Master of Science degree must give proof that he possesses a reading knowledge of French or German. In the place of a thesis, a research problem is required of each candidate. The solution of this problem, in essay or other suitable form, must receive the approval of the head of the department in which the degree is to be received.

The Degree of Master of Education

The degree of Master of Education is intended for teachers or prospective teachers whose undergraduate work has been in the field of Education rather than of Arts or Science.

Candidates for the degree, Master of Education, may obtain it with a major concentration in Guidance. To do so, candidates must earn at least eighteen credits from the following courses: Ed. 149, 151, 152, 157, 161, 243, 247, 251, 252, 255, 257, 258, 303, and 353; they must also select a thesis subject related to the fields of guidance and personnel.

The requirements for this degree have been stated above. A reading knowledge of a modern foreign language is not required of candidates for this degree. The thirty semester hours of credit should be earned in the field of Education. However, a candidate may, with the approval of the Dean, offer a limited number of courses in the subject which he intends to teach.

Attention is called to the fact that the classes on Saturday morning are from 9:00-10:45 and from 11:00-12:45.

COURSES OF INSTRUCTION

Biology (Bi.)

Professor: Rev. Michael P. Walsh, S.J., *Chairman*

Associate Professor: Leon M. Vincent

Assistant Professors: Francis L. Maynard, Thomas I. Ryan

Instructors: Rev. George F. Lawlor, S.J., Bernard J. Sullivan

Courses of Instruction

Bi. 101. Enbryology.

Anatomy and physiology of reproduction; early stages of development of the chick and mammalian enbryo.

Two lectures and two laboratory periods per week for one semester.

Prof. Sullivan

Bi. 102. Histology.

Microscopic anatomy of tissues and organs of mammalian body.

Two lectures and two laboratory periods per week for one semester.

Prof. Lawlor, S.J.

Bi. 108. Microbiology.

The study of bacteria, yeasts, molds, protozoa, viruses, rickettsias; culture and staining methods, biochemical activities, infection.

Two lectures and two laboratory periods per week for one semester.

Prof. Ryan

Bi. 111-112. Comparative Anatomy.

Comparative study of five classes of vertebrates.

Two lectures and two laboratory periods per week for two semesters.

Prof. Walsh, S.J.

Bi. 121.   HITOLOGICAL TECHNIQUE.

Fixing, dehydration, infiltration, sectioning, and staining methods of various animal tissues and organs. Assigned readings.

Two laboratory periods per week for one semester.

Prof. VINCENT

Bi. 181.   GENETICS.

The principles of heredity. Mendel's laws, linkage and crossing over, the physical basis of heredity, and the arrangement of the genes in the chromosomes. Sex determinism, practical inbreeding and evolution will be discussed.

Two lectures and two laboratory periods per week for one semester.

Prof. WALSH, S.J.

Bi. 231.   INVERTEBRATE ZOOLOGY.

A study of the various classes of onvertebrate animals with emphasis on their physiology and ecology.

Two lectures and two laboratory periods per week for one semester.

Prof. MAYNARD

Bi. 241.   PLANT PHYSIOLOGY.

A study of the physiologlical activities of plants.

Two lectures and two laboratory periods per week for one semester.

Prof. VINCENT

Bi. 253-254.   GENERAL PHYSIOLOGY.

Chemical and physical properties of protoplasm; metabolism, respiration, excretion, growth, irritability, stimulation, adjustment and behaviour.

Two lectures and two laboratory periods per week for two semesters.

Prof. SULLIVAN

Bi. 261.   PARASITOLOGY.

A biological study of parasitism in various animal phyla.

Two lectures and two laboratory periods per week for one semester.

Prof. RYAN

Bi. 271.   FUNDAMENTALS OF CYTOLOGY.

A study of the cytoplasmic and nuclear constituents of the cell with special emphasis on mitosis and meiosis.

Two lectures and two laboratory periods per week for one semester.

Prof. WALSH, S.J.

Bi. 272.   METHODS OF CYTOLOGICAL RESEARCH.

An introduction to research procedures in cytology.
One lecture and one laboratory period per week for one semester.

Prof. WALSH, S.J.

Bi. 301.   SEMINAR.

Discussions dealing with recent developments in various fields of biology.

Two periods per month for two semesters.

BIOLOGY FACULTY

Bi. 303.   RESEARCH.

A research problem will be assigned to the student. It must be a problem of an original nature under the direction of a member of the staff. The credit assigned will be determined by the work accomplished.

Chemistry (Ch.)

Professors: REV. ALBERT F. McGUINN, S.J., *Chairman.* *SAMUEL GLASSTONE, DAVID C. O'DONNELL
Associate Professor: RALPH K. CARLETON
Assistant Professors: ANDRE J. DE BÉTHUNE, PAUL A. MAGINNITY, TIMOTHY McCARTHY

Courses of Instruction

Ch. 111. QUANTITATIVE ANALYSIS.

A course in instrumental methods of analysis, covering the principles of colorimetry, turbidimetry, electrotitrations, pH measurement, polarography, and other instrumental methods that are currently applied to chemical analysis.

Two lectures and two laboratory periods per week for one semester.

Prof. DE BÉTHUNE

Ch. 121. PHYSICAL CHEMISTRY.

A discussion of the fundamental principles involved in the study of chemical phenomena and of various agents which modify chemical and physical change; problem work exemplifying these principles from a quantitative viewpoint will be given.

Three lectures and one laboratory period per week for two semesters.

Prof. DE BÉTHUNE

Ch. 141. BIOCHEMISTRY.

This is an introductory course in Biochemistry. It will include a study of the Chemistry of proteins, carbohydrates and fats, and will cover the main features of metabolism. Laboratory work will include the study of certain biologically important substances and an analysis of body fluids.

Two lectures and two laboratory periods per week for one semester.

Prof. McCARTHY

CH. 152. ORGANIC CHEMISTRY OF HIGH POLYMERS.

A study of substances of high molecular weight, their structure, theory and methods of formation, physical properties and applications.

Two lectures per week for one semester.

Prof. O'DONNELL

* On leave of absence for 1948-49.

Ch. 161. QUALITATIVE ORGANIC ANALYSIS.

This course will treat of systematic methods for the identification of organic compounds.

One lecture and two laboratory periods per week for one semester.

Prof. O'DONNELL.

Ch. 211. ADVANCED QUANTITATIVE ANALYSIS.

This course will treat the fundamental chemistry of the elements from the standpoint of analysis, according to the periodic classification of the elements. Classical and recent methods of separations and analysis of the more common elements will be emphasized.

Three lectures per week for one semester.

Prof. CARLETON

Ch. 222. ATOMIC AND MOLECULAR STRUCTURE.

The energy levels and electronic configurations of single atoms, and of diatomic and polyatomic molecules, as derived from spectroscopy and wave mechanics. The electronic theory of valence. The dimensions and configurations of molecules from X-rays, dipole moments and electron diffraction.

Two lectures per week for one semester.

Ch. 223. ELECTROCHEMISTRY.

The theory of electrolysis and the galvanic cell. Faraday's Laws. Conductance and transference of solutions. The free energy of electrochemical reactions. The measurements of pH. The chemical nature of strong and weak electrolytes. Irreversible phenomena, polarization and overvoltage.

Two lectures per week for one semester.

Ch. 224. THERMODYNAMICS.

The first and second laws of thermodynamics. The entropy and free energy. The equilibrium of chemical reactions. The third law of thermodynamics. Elementary statistical mechanics. The tabulation of entropy and free energy for chemical compounds.

Two lectures per week for one semester.

Ch. 225. REACTION KINETICS AND SURFACE CHEMISTRY.

First, second and third order reactions. The Arrhenius Equation and the energy of activation. The theory of absolute reaction rates. The properties of surfaces. Absorption and catalysis. The colloidal state.

Two lectures per week for one semester.

Ch. 226. PHYSICAL CHEMISTRY OF HIGH POLYMERS.

The size of macro molecules. Mechanical properties and viscosity. The thermodynamics and statistical mechanics of high polymer systems. Copolymerization.

Two lectures per week for one semester.

Ch. 251. ADVANCED ORGANIC CHEMISTRY.

A further development with greater detail of the theories of organic chemistry, especially those of more recent origin; with the preparation of compounds which will serve as an introduction to research problems.

Two lectures and two laboratory periods per week for two semesters.

Prof. O'DONNELL.
Prof. MAGINNITY.

Ch. 261. QUANTITATIVE ORGANIC ANALYSIS.

This is a course in ultimate organic analysis, using the microtechnique.

One lecture and two laboratory periods per week for one semester.

Prof. MAGINNITY.

Ch. 281. ADVANCED CHEMICAL BIOGRAPHY.

A study of the contributions of outstanding chemists to the development of the science of chemistry.

Two lectures per week for one semester.

Prof. CARLETON.

Ch. 301. SEMINAR.

Discussions dealing with advanced topics in different fields of Chemistry.

One period per week for two semesters.

CHEMISTRY FACULTY.

Ch. 303. RESEARCH.

A laboratory research problem will be assigned, requiring a thorough literature search, followed by directed work of an original character in the laboratory. The credit assigned will be determined by the work accomplished.

CHEMISTRY FACULTY.

NOTE: Supplementary courses in Physics or Mathematics may be required, dependent upon the student's grasp of these subjects.

CLASSICAL LANGUAGES

Professor: REV. LEO P. McCAULEY, S.J., *Chairman*

Associate Professor: AUGUSTINE L. KEEFE

Instructor: EDWARD F. GRUSKOWSKI

Courses of Instruction

Greek (Gk.)

Gk. 151.　GREEK COMEDY.

The plays of Aristophanes. The spirit of Greek Comedy, its significance and influence on Greek life will be studied.

By arrangement.　　　　　　　　　Three semester hours.

(1st semester)　　　　　　　　　　*Prof.* KEEFE

Gk. 171.　GREEK LYRIC POETRY.

A survey of Greek lyric poetry with selected readings from Callinus to Christian times.

By arrangement　　　　　　　　　Three semester hours.

(2nd semester)　　　　　　　　　*Prof.* KEEFE

Gk. 141.　THE ODYSSEY.

The translation of Homer's Odyssey together with a study of the historical background of the Homeric poems, their language, and versification.

By arrangement.　　　　　　　　　Six semester hours.

　　　　　　　　　　　　　　　Prof. McCAULEY, S.J.

Gk. 199.　READINGS FOR PREREQUISITES.

Assignments in the reading of authors and related literature to be done under direction by candidates who are deficient in prerequisite credits. Papers and examinations are required. The number of credits will depend on the judgment of the director.

　　　　　　　　　　　　　　　Prof. McCAULEY, S.J.

Gk. 203.　THE HISTORY OF GREEK PROSE.

A study of the development of Greek prose from the beginning to Lucian. Special attention will be given to the writers of the fifth and fourth centuries before Christ.

By arrangement.　　　　　　　　　Four semester hours.

　　　　　　　　　　　　　　　Prof. McCAULEY, S.J.

Gk. 215.   ATTIC ORATORS.

A study of the great period of Attic eloquence against its literary, political, and social background.

Four semester hours.

Gk. 233.   GREEK TRAGEDY.

A study of the origin and development of Greek tragedy with the reading of selected plays of the three great tragedians.

Four semester hours.

Gk. 299.   READINGS AND RESEARCH.

Assignments for deepening knowledge of authors and problems previously studied. The number of credits will depend on reports and examinations.

Prof. MCCAULEY, S.J.

LATIN   (Lt.)

Lt. 101.   SURVEY OF LATIN LITERATURE.

This course offers a general view of Latin literature, affording an opportunity for extensive reading and critical appreciation of representative masterpieces from the earliest times to the end of the Silver Age.

By arrangement.   Six semester hours.

Prof. GRUSKOWSKI

Lt. 171.   THE LATIN FATHERS.

An outline study of the Fathers. Selections from the earlier Fathers and careful study of St. Augustine's *Confessions,* together with selections from the *De Civitate Dei.*

Six semester hours.

Lt. 181.   MEDIAEVAL LATIN.

A survey of the development of Latin Literature of the Middle Ages. Selected readings from the various authors.

Six semester hours.

Lt. 199.   READINGS FOR PREREQUISITES.

Assignments in the reading of authors and related literature to be done under direction. The number of credits given will depend on the judgment of the director.

Prof. MCCAULEY, S.J.

Lt. 235. PLAUTUS AND TERENCE.

A detailed study of Plautus and Terence; the linguistic character and literary technique of these Roman writers and the character of the Roman stage will be fully discussed.
Offered 1947-48.   Four semester hours.

Prof. GRUSKOWSKI

Lt. 241. THE ROMAN EPIC.

A study of the technique of the epic, its introduction into Roman literature, its development and its influence.

Four semester hours.

Lt. 251. CICERO: PHILOSOPHICAL ESSAYS.

A study of Cicero's personal philosophy in the light of his probable Greek sources and the philosophies current in Rome in the late Republic.

Tues., 3:30-6:15.   Four semester hours.
Prof. McCAULEY, S.J.

Lt. 261. THE CORRESPONDENCE OF CICERO.

This course includes a study of the history and the politics of the last decades of the Republic.

Sat., 9:00-10:45.   Four semester hours.

Prof. McCAULEY, S.J.

Lt. 299. READINGS AND RESEARCH.

Assignments for deepening knowledge of authors and problems previously studied: The number of credits will depend on reports and examinations.

Prof. McCAULEY, S.J.

Lt. 301. SEMINAR IN LATIN STUDIES.

The design of this seminar is to afford an introduction to the methods, history and problems of Classical Scholarship. This seminar is prescribed for graduate students in the Department of Classical Languages and must be taken by all who have not as yet fulfilled this requirement.

By arrangement.   Two semester hours.
Prof. McCAULEY, S.J.

EDUCATION (Ed.)

Professors: REV. CHARLES F. DONOVAN, S.J., *Chairman*;
         REV. JOHN F. DOHERTY, S.J.
Associate Professors: WYLMA R. CURTIN,
               REV. JAMES F. MOYNIHAN, S.J.
Assistant Professor: REV. EDWARD H. NOWLAN, S.J.
Lecturers: MATHEW P. BUTLER, SISTER MARY JOSEPHINA, S.S.J.,
       REBECCA M. McKEON, WILLIAM J. O'KEEFE,
       WILLIAM A. WELCH

Courses of Instruction
Principles of Education

Ed. 101.   PHILOSOPHY OF EDUCATION.

The course includes a discussion of the agencies of education, the social environment of the child, the major problems connected with curriculum, organization, administration and methods of teaching. The true aim of education is outlined and some of the more conspicuous among the false or inadequate aims of education are examined and criticized.

Tues., 4:30-6:15.   Two semester hours.
(1st semester)   *Prof*. DONOVAN, S.J.

Ed. 205.   PROBLEMS IN EDUCATIONAL PHILOSOPHY.

The presentation and attempted solution from a philosophical point of view of some of the numerous problems touching curricula, equipment, organization, administration, and methods of teaching.

Tues., 4:30-6:15.   Two semester hours.
(2nd semester)   *Prof*. DONOVAN, S.J.

Ed. 207.   EDUCATIONAL SOCIOLOGY.

Investigation of social problems from the educational viewpoint, group needs and adjustments.

Mon., 4:30-6:15.   Four semester hours.
(2nd semester)   *Prof*. NOWLAN, S.J.

Ed. 211. SUPERVISION AND TECHNIQUES OF TEACHING
IN THE ELEMENTARY GRADES.

This course aims to give a comprehensive treatment of the problems, procedures and principles of teaching in and supervision of the elementary school. Relationship of supervision to teacher and pupil, methods and trends of modern supervision in the elementary school from the standpoint of teacher and supervisor will be discussed.

Sat., 9:00-10:45.   Two semester hours.
(1st semester)   •SISTER MARY JOSEPHINA, S.S.J.

Ed. 213. THE PUPIL, TEACHER, AND THE CURRICULUM
OF THE ELEMENTARY SCHOOL.

The basis of this course is a study of the modern elementary school with emphasis on the overview of the pupil, the teacher and the curriculum. Pupil-Teacher relationship and a consideration of the newer trends in elementary education as the activity program, integrated curriculum, and provision for individual differences among pupils will be surveyed.

Sat., 9:00-10:45.   Two semester hours.
(2nd semester)   SISTER MARY JOSEPHINA, S.S.J.

Ed. 217. EDUCATION OF EXCEPTIONAL CHILDREN.

A course based on the psychological principles of education for those children who deviate from the normal. It includes the rapid learners, the slow learners, the hard of hearing and the visually handicapped.

Fri., 4:30-6:15.   Four semester hours.
Prof. MCKEON.

Ed. 219. IMPROVEMENT OF READING.

A basic course dealing with practical techniques and underlying principles in the methods of improving reading in the first six grades. A prerequisite to clinical courses.

Sat., 11:00-12:45.   Four semester hours.
Prof. MCKEON.

Ed. 301. METHODOLOGY AND RESEARCH.

This course introduces the student to the proper approach to the study of Education. The use of bibliography, particular value of specific works, and the handling of materials relating to specific problems will be treated. This course is prescribed for all graduate students whose major is education and must be taken by all who have not as yet satisfactorily fulfilled this requirement.

Thurs., 3:30-4:20.   Two semester hours.

Prof. DONOVAN, S.J.

Ed. 303. THESIS SEMINAR.

The problems for research will be suited to the needs of the participants. The seminar will be supplemented by individual conferences.

Four semester hours.

EDUCATION FACULTY.

Ed. 305. CLASSROOM METHODS.

The aim of this course is to acquaint the teacher in training with educational organization, classroom management and procedure, stressing actual classroom practice and problems the young teacher must solve. For student teachers there will be, in addition to class work, fifty hours of observation with written reports, and seventy-five hours of supervised teaching in selected schools.

Wed., 3:30-4:20.   Two semester hours for class work.

Four semester hours for observation and practice.

Prof. DOHERTY, S.J.

MR. BUTLER.

History of Education

Ed. 129.　History of Education in the United States.

An historical inquiry into the beginnings and development to modern times of American schools. Among the topics discussed are: Education under public and private auspices; the influence of individual educators; the evolution of administrative forms; institutional types and practices; and the progressive adjustment of our schools to new conditions.

Four semester hours.
Prof. DOHERTY, S.J.

Ed. 227.　Survey of Educational Thought in Modern Times.

An examination and interpretation of educational theories in the modern period and an analysis of ensuing movements and processes in the schools. The background of contemporary thought; types and schools of educational philosophy; their essential characteristics and practical import; their present day influence, estimated worth and significance for future educational progress.

Four semester hours.
Prof. DONOVAN, S.J.

Ed. 235.　History of Education in Massachusetts.

This course will discuss the origin and development of Public School Education in Massachusetts. Among the topics considered are: early schools and educational legislation; the decline of education in the eighteenth century together with its causes and implications; the Academy Movement and its influence on Public Education; the revival of education in the nineteenth century; Horace Mann and the State Board of Education; the growth of the Public School idea; the reorganization of the State Board of Education at the beginning of the twentieth century; the contributions of Massachusetts to the development of public education in the United States.

Four semester hours.
Prof. DOHERTY, S.J.

Educational Psychology, Guidance and Personnel

N.B.   Please consult page 13 for a major in the field of guidance.

Ed. 143.   PSYCHOLOGICAL PROBLEMS AND BACKGROUND IN EDUCATION.

An investigation of various problems and schools of thought in modern psychology with reference to their educational implications. Special emphasis will be given to the psychology of perception and cognition.

Offered 1947-48.   Two semester hours.
                                      Prof. MOYNIHAN, S.J.

Ed. 149.   ELEMENTARY EDUCATIONAL STATISTICS.

An introductory course in the statistical procedures employed in educational problems and research.

Sat., 9:00-10:45.   Four semester hours.
                                              Prof. CURTIN.

Ed. 151.   EDUCATIONAL TESTS AND MEASUREMENTS.

The uses, administration and interpretation of educational achievement tests. *A laboratory fee of two dollars is assessed for this course.*

Thurs., 4:30-6:15.   Two semester hours.
(1st semester)   *Prof.* CURTIN.

Ed. 152.   PSYCHOMETRICS.

An introduction to individual mental testing. Practical experience in giving tests. Survey of psychological methods of measuring human traits.

Thurs., 4:30-6:15.   Two semester hours.
(2nd semester)   *Prof.* CURTIN.

Ed. 241.   PROBLEMS OF SOCIAL PSYCHOLOGY IN EDUCATION AND GUIDANCE.

A study of the social aspects of human nature with special reference to problems in secondary education and guidance. The most recent techniques for studying individual and group attitudes will be discussed.   Crowd psychology, social learning and motivation, the role of emotion, temperament and disposition in social relations; suggestibility, hypnotism, language, and the socially attractive personality are topics to be included.

Mon., 4:30-6:15.   Two semester hours.
(1st semester)   *Prof.* NOWLAN, S.J.

Ed. 243.   Empirical Educational Psychology.

The nature and organization of traits, development, learning and retention. This course will be supplemented by special research reports.

Mon., 4:30-6:15.   Six semester hours.

Prof. Curtin.

Ed. 245.   Psychology of Elementary School Subjects.

The learning process and factors affecting achievement in arithmetic, handwriting, and the social studies.

Two semester hours.

Prof. Curtin.

Ed. 246.   Psychology of High School Subjects.

The learning process and factors affecting achievement in mathematics, science and language.

Two semester hours.

Prof. Curtin.

Ed. 247.   The Affective and Conative Functions in Education.

This course will stress the emotional and volitional functions in education. Problems of motivation, interests, discipline, character education, school adjustment, methods of studying and rating the personality will be considered.

Offered 1947-48.   Two semester hours.

Prof. Moynihan, S.J.

Ed. 249.   Advanced Educational Statistics.

An advanced course in the theory of test construction and statistical evaluation. Prerequisite—Educ. 149.

Two semester hours.

Prof. Curtin.

Ed. 251.   Clinical Child Guidance.

Application of psychological data and methods to clinical problems with emphasis upon the specific behavior and personality problems of childhood and adolescence. Evaluation of modern clinical procedures in diagnosis and therapy.

Two semester hours.

Prof. Moynihan, S.J.

Ed. 252. Mental Hygiene for Teachers.

The problems of personal mental hygiene in relation to borderline mental disorders and the major psychoses. Basic principles of mental hygiene. Orientation to the field of psychiatry.

Wed., 4:30-6:15.   Four semester hours.

Prof. Moynihan, S.J.

Ed. 255. Principles and Techniques of Guidance.

The organization, principles and procedures in educational and vocational guidance. Special problems and methods at the various school levels.

Sat., 11:00-12:45.   Four semester hours.

Prof. Moynihan, S.J.

Ed. 257. Group Guidance in the Elementary Grades.

Treatment of major problems, amenable to group guidance in the elementary grades. Special emphasis on the problems of study skills, remedial reading and guidance of exceptional children.

Two semester hours.

Prof. Moynihan, S.J.

Ed. 258. Vocational Information and Placement.

The problems of occupational orientation. Knowledge of occupational opportunities, aptitudes and interests. Techniques of placement and personnel work.

Two semester hours.

Ed. 341. Seminar in Educational Psychology.

A group investigation of some modern problems in educational psychology. Prerequisites are: Ed. 243, 149, 151, 101, and one course from field of guidance and personnel.

Wed., 4:30-6:15.   Two semester hours.

(2nd semester)   *Prof.* Curtin.

Ed. 353. Field Work In Guidance.

Actual field work in guidance and personnel work. The number of credits given will depend on the judgment of the director.

Education Faculty

Ed. 355.   Workshop in Test Construction.
This course provides practical experience in the construction of
achievement tests for the content subjects of the high school cur-
riculum. Enrollment is restricted to those religious who are selected
for this work.
Sat., 11:00-12:45.   Four semester hours.
                                                Prof. Curtin.

School Administration, Supervision and Curriculum

Ed. 161.   General School Administration and Organization.
This course will present the principles governing the organiza-
tion, conduct, and administration of elementary, junior and senior
high schools, and special classes. The purpose and aim of each level
will be critically examined; proper integration and articulation sug-
gested.
Fri., 4:30-6:15.   •   Two semester hours.
(1st semester)   Prof. Welch.

Ed. 265.   Problems in Present Day School Administration.
This course will consider problems encountered by teachers, prin-
cipals and superintendents in the administration of the school.
Special emphasis will be placed on the relations of the teacher, pupil
and parent; current classroom problems discussed; trends in salary
schedules examined; proper selection of supplies and equipment;
and the drafting of the school department budget study.
Fri., 4:30-6:15.   Two semester hours.
(2nd semester)   Prof. Welch.

Ed. 267.   Legal Aspects of Public School Administration.
This course is designed to meet the everyday needs of school
committees. superintendents, principals and teachers serving in the
public schools of Massachusetts. It covers the entire field of statu-
tory and case law governing the administration of these schools.
Among the subjects treated are: Education as a function of state
government; responsibility of the state and its municipalities re-
specting public education; legal status of the school committees;
the authority of the School Committee, its exercise and review by
the courts; financing the public education; the school budget; the
school curriculum; scholastic standards; school discipline; school
attendance laws; the school superintendent, powers and duties;
superintendency unions; relations of principals and teachers with
the school committee, the superintendent, and with the pupils and
their parents; authority and responsibility of principals and class
room teachers; purpose and operation of the tenure law.
Thurs., 4:30-6:15.   Four semester hours.
                                                Prof. O'Keefe.

ENGLISH (En.)

Professors: Rev. William L. Johnson, S.J., *Chairman;* Edward L. Hirsh, Rev. John A. O'Callaghan, S.J.

Assistant Professor: Robert G. Walker

Lecturer: Rev. Carol L. Bernhardt, S.J.

Courses of Instruction

En. 105. Introduction to Mediaeval Literature.

Introduction to the literary, artistic, social and institutional backgrounds of the Middle Ages as they express themselves in English Literature.

En. 121. Shakespeare.

This course includes a brief study of the origins and development of the drama as a literary form, and a detailed consideration of Shakespeare in eight or ten of the principal dramas. The aim of the lectures is twofold: to relate Shakespeare to the spirit of the age which produced him; and to explore the Elizabethan mind through the dramatic art of its most prominent literary spokesman.

Six semester hours.

En. 128. Tudor Drama.

The study of the development of the drama in the sixteenth century. Readings in representative dramatists.

En. 131. The Romantic Movement in English Poetry.

The works of the several poets who reveal the departure from the tradition established by Dryden and Pope. The poetry of the earlier and later romantic poets examined in its relation to the life and thought of England and Europe.

En. 141. Victorian Prose.

A critical survey of the development of Victorian tendencies in prose, including Carlyle, Newman, Arnold, et al.

Six semester hours.

Prof O'Callaghan, S.J.

En. 143.   VICTORIAN NOVEL AND PROSE.

This course is a continuation of the Victorian essayists and aims to point out the development of the Victorian novel and the objectives of the various prose writers and poets.

<div style="text-align: right">Six semester hours.
Prof O'CALLAGHAN, S.J.</div>

En. 151.   SURVEY OF AMERICAN LITERATURE, I.

A survey of the principal writers and movements in American literature from the Colonial period down to Emerson.

En. 153.   SURVEY OF AMERICAN LITERATURE, II.

A survey of the principal writers and movements in American literature from Emerson to the present.

<div style="text-align: right">Six semester hours.</div>

En. 201.   ANGLO-SAXON.

This course embraces a study of the grammar of Anglo-Saxon with readings from representative literary works and selections.

<div style="text-align: right">Six semester hours.</div>

En. 205.   MEDIAEVAL LITERATURE.

This course, primarily literary rather than linguistic, is a study of the main tendencies in English Literature of the twelfth, thirteenth, and fourteenth centuries. Considerable attention is paid to mediaeval institutions, life and manners as revealed in literature.

<div style="text-align: right">Four semester hours.</div>

En. 207.   MEDIAEVAL DRAMA.

The drama of the mediaeval Church, the religious cycles, moral drama, and other dramatic manifestations down to 1500 will be studied.

<div style="text-align: right">Four semester hours.
Prof. JOHNSON, S.J.</div>

En. 211.   CHAUCER.

A study of the works, the times and the contemporaries of Chaucer. The aim of this course is to give a knowledge of the writings of Chaucer and of the literature of Chaucerian scholarship.

Mon., 4:30-6:15. Four semester hours.

<div style="text-align: right">Prof. HIRSH.</div>

En. 225.   Tudor Poetry.

A study of the non-dramatic poetry of the sixteenth century, with particular emphasis on Spenser and the sonneteers.

Four semester hours.

Prof. Johnson, S.J.

En. 227. Drama To 1642.

Pre Shakespearian and Elizabethan drama, except that of Shakespeare, is the matter investigated. Special attention is given to the literature on the subject.

Wed., 4:30-6:15.   Four semester hours.

Prof. Johnson, S.J.

En. 228.   Shakespeare.

The whole body of Shakespeare's dramatic works will be studied. The scholarship on the plays will be reviewed, and major problems of contemporary investigators will be evaluated.

Tues., 4:30-6:15.   Four semester hours.

Prof. Johnson, S.J.

En. 229.   Seminar: Shakespeare.

An intensive study of two plays, *Othello* and *A Midsummer-Night's Dream,* with extensive readings of the literature treating of the plays and their literary relations. Reports and discussions.

Thurs., 4:30-6:15.   Four semeter hours.

Prof. Johnson, S.J.

En. 233.   English Prose: 1603-1727.

A study of the most important prose writers including Bacon, Walton, Fuller, Dryden, Pepys, Defoe, Swift, Addison, and Steele. Special attention is given to the development of types of prose and to the rise of literary periodicals.

Sat., 9:00-10:45.   Four semester hours.

Prof. Johnson, S.J.

En. 235.   English Poetry of the Seventeenth Century.

A detailed study of the poets of the period will be made; special attention will be given to the more representative poets, such as, Donne, Herbert, Crashaw, Traherne and Vaughan. Milton will not be included in this course.

Fri., 4:30-6:15.   Four semester hours.

Prof. Bernhardt, S.J.

En. 237.   Milton.

An intensive study of Milton, his poetry and prose, and of his literary influence.

Wed., 4:30-6:15.   Four semester hours.
Prof. Hirsh.

En. 247.   The Age of Johnson.

A study of Johnson and his circle. An examination of the neo-classical spirit in English literature.

Sat., 11:00-12:45.   Four semester hours.
Prof. Hirsh.

En. 251.   The Romantic Movement.

A study of the literary theory and practice of the major romantic writers: Wordsworth, Coleridge, Byron, Shelley, Keats, Landor, Lamb, Hazlitt, De Quincey. Reading in these authors and in the scholarship on their intellectual and biographical backgrounds.

Thurs., 4:30-6:15.   Four semester hours.
Prof. Walker.

En. 253.   Victorian Prose Writers.

Studies in the writers of English Prose from 1830 to 1890. Lectures on the essayists, Carlyle, Ruskin, Newman, Arnold, Pater; and the novelists, Dickens, Thackeray, Austen, the Brontes, Meredith, and Hardy.

Four semester hours.
Prof O'Callaghan, S.J.

En. 255.   Victorian Poetry.

A study of the leading poets of the nineteenth century with special emphasis on Tennyson and the Brownings. The minor poets, as spokemen for their age, will also be considered.

Mon., 4:30-6:15.   Four semester hours.
Prof O'Callaghan, S.J.

En. 261.   American Literature, 1608-1865.

A study of the development of American culture as reflected in the writings of the principal figures of the Colonial, Revolutionary, Romantic and Transcendental periods of American literature.

Four semester hours.

En. 263. AMERICAN LITERATURE, 1865-1947.

A study of the rise of realism in the literature of the late 19th century and the development of the various literary forms in 20th century American literature.

Four semester hours.

En. 295. LIFE AND THOUGHT IN ENGLISH POETRY.

Among the topics to be considered in this course are: the principles of estimation and appreciation, philosophy of poetic art, science and poetry, history and fiction, intellect and emotion, religion and art.

Four semester hours.

Prof. BERNHARDT, S.J.

En. 297. THEORIES OF POETRY.

An examination of theories of poetry and of the principles of literary criticism from Plato to the present day.

Four semester hours.

Prof. JOHNSON, S.J.

En. 301. BIBLIOGRAPHY AND METHOD.

The purpose of this course is to introduce the student to the proper approach to the study of English literature. The science of bibliography, the particular value of specific works, and the handling of materials relating to chosen problems will be treated in order to assist students in preparing their theses. This course is prescribed for graduate students in the Department of English and must be taken by all who have not yet satisfactorily fulfilled this requirement.

Sat., 11:00-11:50.

Two semester hours.

Prof. JOHNSON, S.J.

En. 303. RESEARCH AND DISSERTATION GUIDANCE.

Problems of research, supplemented by individual conferences.

By arrangement.

ENGLISH FACULTY.

GAELIC   (Gl.)

Associate Professor: Rev. John E. Murphy, S.J., *Chairman*

Courses of Instruction

Gl. 1.   Gaelic for Beginners.

Elements of grammar; greetings, proverbs, short stories. This course aims to give a reading knowledge of the language and a basis for conversation in Gælic. This course does not carry credit towards a master's degree.

By arrangement.   Six semester hours.
                                                            Prof. Murphy, S.J.

Gl. 101.   Advanced Gaelic.

Advanced grammar; idioms; translation into English; reading of modern Gælic authors.

By arrangement.   Four semester hours.
                                                            Prof. Murphy, S.J.

Gl. 221.   Ancient Gaelic Literature.

The famous epic, *The Tain*, and its allied stories. *The Finn Saga*, *The Prime Stories of Ireland*, *The Voyage* and Vision Literature. The Bards, their productions; lives of saints and their religious writings.

Mon., 4:30-6:15.   Four semester hours.
                                                            Prof. Murphy, S.J.

Gl. 231. GAELIC LITERATURE, 1000-1550.

Historical and literary background of the period; Vision literature of Ireland; the Bards: their importance, their training and literary production; lives of the Saints and religious writings; various translations from Continental literature. Such writers as reveal the highest development of the period will be treated. No knowledge of Gælic is required.

Four semester hours.
Prof. MURPHY, S.J.

Gl. 241. GAELIC LITERATURE, 1600-1940.

Prose and poetry of writers in Gaelic; decline of bardic schools; wandering poets and hedge schoolmasters; the Hidden Ireland; rise of Gaelic League; lives of writers. The course gives a necessary background for a true appreciation of Anglo-Irish literature. No knowledge of Gaelic is required.

Wed., 4:30-6:15.

Four semester hours.
Prof. MURPHY, S.J.

Gl. 261. GAELIC FOLK TALES AND FOLK LORE.

The origin, kind, extent and importance of this type of literature. Comparison of Irish tales with those of other nations. Beliefs and customs explained. The folk tale has an important place in modern elementary education.

To be offered 1949-50.

Four semester hours.
Prof. MURPHY, S.J.

Gl. 271. THE ENGLISH NOVEL IN IRELAND.

Development and literary evaluation of the novel from 1700 to 1945.

To be offered 1949-50.

Four semester hours.
Prof. MURPHY, S.J.

HISTORY AND GOVERNMENT

Professors: Rev. James L. Burke, S.J., *Chairman*;

Rev. Edward H. Finnegan, S.J.

Assistant Professors: John R. Cox,

Rev. Thomas F. Fleming, S.J.

Lecturers: William J. Grattan, Thomas H. D. Mahoney

Courses of Instruction
HISTORY   (Hs.)

Hs. 113.   Historical Factors in Mediaeval Civilization, I.

Two semester hours.

Hs. 114.   Historical Factors in Mediaeval Civilization, II.
A study of the contributions of political and literary personages to the civilization of mediaeval times.
Tues., 4:30-6:15.   Four semester hours.
Prof. Cox.

Hs. 115.   Mediaeval Foundations of Modern History.
Sept. 1948-Jan. 1949.
                or   Three semester hours.
Jan. 1949-May 1949

Hs. 128.   Foundations of Modern European History.
A study of the capital factors in European history from 1500 to the present.
Sept. 1948-Jan. 1949
        or   Three semester hours.
Jan. 1949-May 1949

Hs. 143.   Europe and Asia Since 1918.

Six semester hours.

Hs. 151.   American History Survey, Ia.
A survey of American Civilization from colonial times to 1800.
Sept. 1948-Jan. 1949   Three semester hours.
Prof. Finnegan, S.J.

Hs. 152. AMERICAN HISTORY SURVEY, Ib.

A survey of American Civilization from 1800 to 1865.

Jan. 1949-May 1949.   Three semester hours.
                                       Prof. FINNEGAN, S.J.

Hs. 153. AMERICAN HISTORY SURVEY, IIa.

A survey of American Civilization from 1865 to 1900.

Sept. 1948-Jan. 1949.   Three semester hours.
                                       Prof. FINNEGAN, S.J.

Hs. 154. AMERICAN HISTORY SURVEY, IIb.

A survey of American Civilization from 1900 to the present.

Jan. 1949-May 1949.   Three semester hours.
                                       Prof. FINNEGAN, S.J.

Hs. 157. AMERICAN DIPLOMATIC HISTORY, Ia.

A study of the foreign relations of the U. S. from 1776 to 1823.
                                       Two semester hours.

Hs. 158. AMERICAN DIPLOMATIC HISTORY, Ib.

A study of the foreign relations of the U. S. from 1823 through
the Civil War.
                                       Two semester hours.

Hs. 159. AMERICAN DIPLOMATIC HISTORY, IIa.

A study of the foreign relations of the U. S. from the Civil War
to 1900.
                                       Two semester hours.

Hs. 160. AMERICAN DIPLOMATIC HISTORY, IIb.

A study of the foreign relations of the United States since 1900.
                                       Two semester hours.

Hs. 199. READINGS FOR PREREQUISITES.

A supervised reading of basic works in fields of history in which
candidates are deficient. Reports are to be submitted and exam-
inations taken. The number of credits will depend on the judgment
of the director.
                                       THE DEPARTMENT.

Hs. 201. SCIENCE AND METHOD OF HISTORY.

A study and application of the scientific methodology required for gathering, assessing, synthesizing and documenting historical information. This course is prescribed for all history majors in the graduate school.

Wed., Fri., 4:30-6:15. Six semester hours.
(1st semester) *Prof.* BURKE, S.J.

Hs. 243. CONTEMPORARY WORLD HISTORY.

A detailed study of select topics in European and Asiatic history since 1918.

Thurs., 4:30-6:15. Four semester hours.
Prof. MAHONEY.

Hs. 257. AMERICAN REVOLUTION AND ITS AFTERMATH, I.

A study of selected topics from 1760 to 1776, supplemented by special research reports and conferences.

Three semester hours.

Hs. 258. AMERICAN REVOLUTION AND ITS AFTERMATH, II.

A study of selected topics from 1776-1790, supplemented by special research reports and conferences.

Three semester hours.

Hs. 259. NATIONAL EXPANSION, 1790-1809.

A study of the development of American life from the adoption of the federal constitution through the era of Jeffersonian Democracy. This course is to be supplemented by special research reports and conferences.

Mon. 4:30-6:15. Three semester hours.
(1st semester) *Prof.* GRATTAN

Hs. 260. NATIONAL EXPANSION, 1809-1828.

A study of the development of American life from the end of the Jeffersonian administration to the era of Jackson. This course is to be supplemented by special research reports and conferences.

Mon. 4:30-6:15. Three semester hours.
(2nd semester) *Prof.* GRATTAN.

Hs. 265. CONTEMPORARY UNITED STATES HISTORY.

A lecture and workshop study of select topics in contemporaneous U. S. history.

Sat. 9:00-10:45. Six semester hours.

By arrangement. Four semester hours.
Prof. BURKE, S.J.

Hs. 299. READINGS AND RESEARCH.

A study of source material and authoritative secondary material for a deeper knowledge of some problem previously studied. The number of credits will depend on reports, conferences and examinations.

THE DEPARTMENT.

Hs. 301. THESIS SEMINAR.

Direction of theses on miscellaneous historical topics.

Sat. 11:00-12:30. Four semester hours.
Prof. BURKE, S.J.

Hs. 303. THESIS SEMINAR.

Direction of research on U. S. history, 1760-1790.

By arrangement. Four semester hours.
(1st semester) THE DEPARTMENT.

Hs. 304. THESIS SEMINAR.

Direction of research on National Expansion and Contemporary U. S. HISTORY.

By arrangement. Four semester hours.
(2nd semester) THE DEPARTMENT.

Hs. 305. THESIS DIRECTION.

A *non-credit* course for those who have not completed thesis seminar requirements within the prescribed time.

By arrangement. Two semester hours.
(any semester) THE DEPARTMENT.

GOVERNMENT (Gv.)

Gv. 101.   INTRODUCTION TO AMERICAN NATIONAL GOVERNMENT.

A study of the historical development of American National government under the impact of such factors as federalism, political parties and usage.

Sept. 1948-Jan. 1949.   Three semester hours.
                                          Prof. FLEMING, S.J.

Gv. 102.   INTRODUCTION TO AMERICAN LOCAL GOVERNMENT.

An introductory study of the capital problems of American state and local government.

Jan. 1949-May 1949.   Three semester hours.
                                        Prof. FLEMING, S.J.

Gv. 103.   THE LEGISLATIVE PROCESS.

A study of the functions, organization, personnel and legislative philosophy of the U. S. Congress.

Jan. 1949-May 1949.   Three semester hours.
                                        Prof. FLEMING, S.J.

Gv. 111.   AMERICAN CONSTITUTIONAL HISTORY.

A study of the chief events and personages shaping the development of the American constitutional system.

                                        Four semester hours.

Gv. 113.   AMERICAN CONSTITUTIONAL LAW.

This course analyzes the fundamental principles of the Constitution of the U. S., as developed in the decisions of the Supreme Court.

Sept. 1948-May 1949.   Six semester hours.
                                        Prof. BURKE, S.J.

Gv. 115.   AMERICAN POLITICAL PARTIES.

                                        Two semester hours.

Gv. 119.   PUBLIC AFFAIRS WORKSHOP.

Practice under a unit system, of the finding, weighing and correlation of information on vital current topics.

                                        Three semester hours.

Gv. 151.   HISTORICAL FACTORS IN INTERNATIONAL RELATIONS.

A study of the historical foundations of international relations since 1918.

Six Semester hours.

Gv. 153.   INTERNATIONAL ORGANIZATION AND POLICY.

A study of current international organization and policy.

Sept. 1948-Jan. 1949.   Three semester hours.
                                          Prof. BURKE, S.J.

Gv. 157.   INTERNATIONAL RELATIONS OF THE U. S., I.

A study of the international relations of the United States from 1776 to 1865.

Four semester hours.

Gv. 159.   INTERNATIONAL RELATIONS OF THE U.S. II.

A study of the international relations of the U. S. from the Civil War to the present.

Four semester hours.

Gv. 199.   READINGS FOR PREREQUISITES.

A supervised reading of basic works in areas of government in which the candidates may be deficient.   Reports are to be submitted, oral interviews conducted, and examinations taken. The number of credits will depend on the judgment of the director.

Prof. BURKE, S.J.

Gv. 201.   PROBLEMS OF AMERICAN GOVERNMENT.

Special topics in American government.

Sept. 1948-June 1949.   Six semester hours.
                                          Prof. FLEMING, S.J.

Gv. 251.   CONTEMPORARY INTERNATIONAL RELATIONS.

A detailed study of the historical aspects of international relations since 1918.

Thurs. 4.30-6:15.   Four semester hours.
                                          Prof. MAHONEY.

Gv. 291. Historical Foundations of Political Science.

A study and application of the scientific methodology required for gathering, assessing, synthesizing and documenting the historical data needed in the study of political science.

Wed.-Fri. 4:30-6:15.   Six semester hours.
(1st semester)   *Prof*. Burke, S.J.

Gv. 299. Readings and Research.

A directed study of bibliographical, source and authoritative secondary material for a deeper knowledge of some problem previously studied. The number of credits will depend on reports, conferences and examinations.

Prof. Burke, S.J.

Gv. 301. Thesis Seminar.

Direction of thesis research on miscellaneous political science topics.

By arrangement.   Four semester hours.
                                        Prof. Burke, S.J.

Gv. 303. Thesis Seminar.

Direction of research in American Constitutional law.

By arrangement.   Four semester hours.
(1st semester)   *Prof*. Burke, S.J.

Gv. 304. Thesis Seminar.

Direction of thesis research in American constitutional law.

By arrangement.   Four semester hours.
(1st semester)   *Prof*. Burke, S.J.

Gv. 305. Thesis Direction.

A *non-credit* course for those who have not completed thesis seminar requirements within the prescribed time.

By arrangement.   Two semester hours.
(any semester)   *Prof*. Burke, S.J.

MATHEMATICS (Mt.)

Professors: REV. GEORGE A. O'DONNELL, S.J., *Chairman;*
RENE MARCOU

Associate Professors: WYLMA R. CURTIN, HAROLD A. ZAGER.

Courses of Instruction

Mt. 111. HIGHER ALGEBRA.
Determinants; matrices; invariants; quadratic forms; polynomials.
By arrangement. Four semester hours.
Prof. MARCOU.

Mt. 141. DIFFERENTIAL EQUATIONS.
The study and solution of equations of the first and second order;
integration by series; applications to Chemistry and Physics.
By arrangement. Three semester hours.
Prof. MARCOU.

Mt. 142. ADVANCED CALCULUS.
The expansion of the elementary functions for real and complex
values, partial differentiation and implicit functions, curvilinear
coordinates, definite integral, line and contour integrals, the gamma
and beta functons, Bessel functions, and Lagrange's equations.
Offered 1947-1948. Six semester hours.
Prof. O'DONNELL, S.J.

Mt. 143. PARTIAL DIFFERENTIAL EQUATIONS OF PHYSICS.
The general methods for the solution of the differential equations
of Poisson, Laplace, and the Wave equation for applications in
Physics; the generalized (curvilinear) coordinate transformation
theory; Fourier's heat conduction equation; Fourier's series; Bessel's
functions; Legendre's polynomials; orthogonal function theory.
By arrangement. Three semester hours.
Prof. MARCOU.

Mt. 151. VECTOR ANALYSIS.
Fundamental operations; the calculus of vectors; the operator
Del; the theorems of Green, Stokes and Gauss.
By arrangement. Three semester hours.
Prof. MARCOU.

Mt. 171. Elements of Mathematical Statistics.

Central tendency, variability, simple correlation, reliability, partial and multiple correlation, correlation ratio, normal curve, factor analysis, analysis of variance, chi square. Prerequisite: Differential and Integral Calculus.

Six semester hours.
Prof. Curtin.

Mt. 181. Finite Groups.

An introduction to the study of finite groups, together with applications of this theory to Algebra and Geometry.

Four semester hours.
Prof. Zager.

Mt. 231. Differential Geometry.

A study of the differential geometry of curves and surfaces in ordinary space. Differential invariants. Frenet's formulae.

Mon., Wed. 4:30-5:45.

Six semester hours.
Prof. Marcou.

Mt. 243. Riemannian Geometry and Tensor Calculus.

The study of determinants, matrices, functional determinants and matrices; vectors; covariant, contravariant, mixed tensors; the Riemannian metric; Cristoffel symbols; covariant differentiation; the Ricci tensor and the curvature of Riemannian space; hypersurfaces.

Offered 1947-48.

Six semester hours.
Prof. Marcou.

Mt. 245. Integral Equations.

The classical theory of linear integral equations as developed by Volterra, Fredholm and Hilbert will be presented together with applications to mathematical physics.

Three semester hours.
Prof. O'Donnell, S.J.

Mt. 251. POTENTIAL THEORY.

Newtonian attraction and potential; logarithmic potential; equations of Laplace and Poisson. The subject matter will be treated from the vector point of view.

Six semester hours.
Prof. MARCOU.

Mt. 261. THEORY OF FUNCTIONS OF A COMPLEX VARIABLE.

The following topics will be treated; complex number system; limits; continuity; differentiation and integration; transformations; series; residues; multiple-valued functions and Riemann Surfaces.
Tues., Thurs., 4:30-5:45. Six Semester hours.
Prof. O'DONNELL, S.J.

Mt. 263. THEORY OF FUNCTIONS OF A REAL VARIABLE.

The presentation and formulation of the concepts of infinitesimal analysis more precise than the intuitive treatment in elementary calculus. The topics considered are: real numbers; point sets; limits of sequences and functions; continuity; properties of differentials; theory of Riemann, Stieltjes and Lebesque integration.
Fri., 4:00-6:15. Six semester hours.
Prof. O'DONNELL, S.J.

Mt. 265. ELLIPTIC FUNCTIONS.

The periodicity of simple periodic functions; double periodic functions; general theory of Weierstrassian functions.

Three semester hours.
Prof. O'DONNELL, S.J.

Mt. 281. INTRODUCTION TO THE LAPLACE TRANSFORM.

The Laplace transform, its inverse, and applications to simple functions. The Laplace transforms of integro-differential equations in one independent variable, of algebraic rational fractions. Solution of one dismensional problems in electrical and mechanical systems. Properties of the Laplace transform.
Sat., 9:00-10:45. Four semester hours.
Prof. MARCOU.

Mt. 301. SEMINAR.

Problems of research and thesis guidance, supplemented by individual conferences. THE FACULTY.

PHILOSOPHY (Pl.)

Professor: Rev. John A. O'Brien, S.J., *Chairman*.

Associate Professors: Rev. Alexander A. Duncan, S.J.,
    Rev. John A. McCarthy, S.J.

Assistant Professors: Rev. Edward J. Keating, S.J.,
    Fakhri B. Maluf.

Lecturer: Rev. Joseph P. Kelly, S.J.

Courses of Instruction

Pl. 91.   Fundamental Philosophy, I.

This course offers a treatment of the more important problems of general and special metaphysics to students who lack prerequisites for graduate work in Philosophy. Enrollment is limited to students who wish to major in Philosophy in the Graduate School.

By arrangement.   Four semester hours.
                                   Prof. O'Brien, S.J.

Pl. 92.   Fundamental Philosophy, II.

This course offers an introduction to Philosophy and a study of the more important sections of Logic and Ethics to students who lack prerequisites for graduate work in Philosophy. Enrollment is limited to students who intend to major in Philosophy in the Graduate School.

By arrangement.   Four semester hours.
                                   Prof. O'Brien, S.J.

Pl. 141.   St. Thomas and the Philosophy of Man.

A course on the nature of man as exemplified in the psychological writings of St. Thomas. Pertinent passages from the *Summa Theologica* and the *Summa Contra Gentiles* will be examined.

Tues., 4:30-6:15.   Four semester hours.
                                   Prof. McCarthy, S.J.

Pl. 151.   Social Philosophy.

This course will be a study of the philosophy of Catholic political and economic thought and an application of that thought to modern day problems. Opposing schools of thought will also be discussed and evaluated.

Mon., 4:30-6:15.   Two semester hours.

(1st semester)   *Prof*. O'Brien, S.J.

Pl. 173.   HISTORY OF MEDIAEVAL PHILOSOPHY.

The history of philosophy from St. Augustine to William of Ockam will be treated. Emphasis will be placed on the origin, growth and full development of Scholasticism.

Mon., 4:30-6:15.   Two semester hours.
(2nd semester)   Prof. O'BRIEN, S.J.

Pl. 175.   HISTORY OF MODERN PHILOSOPHY.

Beginning with Descartes, the history of philosophy will be traced through Kant to contemporary philosophers.

Thurs., 4:30-6:15.   Four semester hours.
                                             Prof. DUNCAN, S.J.

Pl. 201.   ST. AUGUSTINE: DE CIVITATE DEI.

A reading and analysis of the text of *The City of God*, both the Latin original and English translations. Special attention will be given to the separation of the temporary from the timeless and to a discussion and application of St. Augustine's fundamental principles to our times.

Sat., 9:00-10:45.   Two semester hours.
(1st semester)   Prof. MALUF.

Pl. 203.   ST. AUGUSTINE.

A study of the *Confessions* of St. Augustine with special emphasis on the philosophic parts of the book, and with additional readings from St. Augustine's other works.

To be offered 1949-50.   Two semester hours.
                                             Prof. MALUF.

Pl. 205.   PLATO.

After introductory lectures on Plato's life, writings and philosophy, selected dialogues will be read and studied.

To be offered 1949-50.   Four semester hours.
                                             Prof. O'BRIEN, S.J.

Pl. 207.   ARISTOTLE.

A study of the speculative philosophy in texts selected from the major works, with emphasis on Aristotelian method of philosophy and science and the classical theory of act and potency.

To be offered 1949-50.   Four semester hours.

Pl. 243. BASIC TOPICS FROM ST. THOMAS.

Selected topics from the *Summa Theologica* and the *Summa Contra Gentiles* with special attempts to understand the definitions of philosophic ideas and to appreciate the philosophic method of St. Thomas. The topics will be chosen chiefly from epistemology, ontology, cosmology and natural theology.

Sat., 9:00-10:45.   Two semester hours.
(2nd semester)   *Prof.* MALUF.

Pl. 245. ST. THOMAS AQUINAS.

Selections from the *Summa Theologica* mainly on problems from cosmology and ontology, e.g., the problem of change, the properties of bodies, the order of the universe, the nature of time and space, the arguments for the existence of God, the analogy of being, and the traces of God in creatures.

To be offered 1949-50.   Two semester hours.
                                         Prof. MALUF.

Pl. 291. SCHOLASTIC PHILOSOPHY AND MODERN SCIENCE.

The purpose of this course is to explain some of the basic relations between these two branches of knowledge. Some of the topics to be discussed are: the method and approach of each branch of knowledge to the external world; the type of knowledge derived from these methods and the objective validity of such knowledge.

The philosophy of the course will be based on the *Disputationes Metaphysicae* of Suarez and the scientific data from the works of such scientists as Planck, Heisenberg, Jeans, Eddington, Whittaker and De Broglie. This course presupposes a college course in Scholastic Philosophy and in Science.

Fri., 4:30-6:15.   Four semester hours.
                                         Prof. KELLY, S.J.

Pl. 299. READINGS AND RESEARCH.

A study of source material and authoritative secondary material for a deeper knowledge of some subject previously studied. The number of credits will depend upon reports and examinations.

                                         Prof. O'BRIEN, S.J.
                                         Prof. MALUF.

PHYSICS (Ph.)

Professors: REV. JOHN A. TOBIN, S.J., *Chairman*; FREDERICK E. WHITE.

Associate Professors: REV. JAMES J. DEVLIN, S.J., JOHN L. SHORK.

Assistant Professors: RICHARD E. DOWNING, REV. JAMES W. RING, S.J.

Courses of Instruction

Ph. 111. THEORETICAL AND APPLIED MECHANICS.

The mathematical treatment of the mechanics of a particle and rigid bodies; the properties of elastic bodies; impulse and momentum; periodic motion.

Three lectures and one laboratory period per week for one semester.

Prof. WHITE.

Ph. 122. ACOUSTICS.

A study of the theory of vibration and sound from a modern viewpoint. This course will afford many examples of the method of Theoretical Physics. Special attention will be given to the theory and design of modern sound apparatus used in Electronics.

Three lectures and one laboratory period per week for one semester.

Prof. WHITE.

Ph. 132. HEAT AND THERMODYNAMICS.

This course gives a mathematical discussion of the generation of heat, thermometry, dilitation, calorimetry, radiation, conduction, thermodynamics, the Kinetic Theory of Gases.

Three lectures and one laboratory period per week for one semester.

Prof. DEVLIN, S.J.

Ph. 141. PHYSICAL OPTICS.

This course presents a mathematical study of wave motion. Huyghen's Principle, dispersion, interference, diffraction, polarization, electro-magnetic theory of light, Quantum Theory.

Three lectures and one laboratory period per week for one semester.

Prof. DEVLIN, S.J.

Ph. 143. GEOMETRIC OPTICS.

The study of fundamentals of geometric optics, image formation by lenses and mirrors, defects of lenses, and testing of optical parts. The theory and use of telescopes, periscopes, range finders, etc.

Two lectures and one laboratory period per week for one semester.

Prof. DEVLIN, S.J.

Ph. 151. ALTERNATING CURRENTS.

The mathematical study of heating, magnetic effects, capacitance, impedance, resonance, etc.

Three lectures and one laboratory period per week for one semester.

Prof. RING, S.J.

Ph. 152. INTRODUCTION TO ELECTRONICS.

Radio transmitting and receiving systems, including radio aids to navigation and aviation: the vacuum tube as an oscillator, amplifier, rectifier, modulator, and demodulator.

Three lectures and one laboratory period per week for one semester.

Prof. DOWNING.

Ph. 196. ELECTRICAL INSTRUMENTS.

Instruction in the use of electrical instruments for current, voltage and power measurements over a wide range of frequencies and the calibration of these instruments.

Two lectures and one laboratory period per week for one semester.

Prof. SHORK.

Ph. 193. ATOMIC PHYSICS.

The particles and waves of modern physics, the electron, positron, proton, neutron, alpha and positive rays, photons, X Rays, gamma rays and cosmic rays are studied from experimental facts and explained by the Quantum Theory and Relativity. Philosophical implications are discussed.

Three lectures a week for one semester.

Prof. TOBIN, S.J.

Ph. 201. THEORETICAL PHYSICS, I.

Concepts of mechanics, straight line motion of particle including oscillations, operational methods, motion of a particle in a plane, Lagrange's equations and generalized coordinates, Hamilton's canonical equations, and transformation theory.

Three lectures per week for one semester.

Prof. WHITE.

Ph. 202.   Theoretical Physics, II.

A continuation of Ph. 201 including dynamics of a rigid body, physics of continuous media, the electromagnetic field, electron theory and dispersion.

Three lectures per week for one semester.

Prof. White.

Ph. 261.   Electronics, I.

Gaseous and thermionic conduction, circuit elements, vacuum tubes, free and forced vibrations, thermionic and ionic oscillators, receivers, rectifiers and amplifiers.

Three lectures and one laboratory period per week for one semester.

Prof. Downing.

Ph. 262.   Electronics, II.

Continuation of Ph. 261 including modulation, regeneration, demodulation, amplification, rectification of commercial frequencies, transmitting and receiving systems for high and ultra-high frequencies, and radiation of energy.

Three lectures and one laboratory period per week for one semester.

Prof. Downing.

Ph. 263.   Electromagnetic Theory, I.

The study of electrostatic fields, dialectric and electrical energy, magnetic fields of magnets and currents, radiation and propagation of waves.

Three lectures per week for one semester.

Prof. Marcou.

Ph. 264.   Electromagnetic Theory, II.

Continuation of Ph. 263. Maxwell's equations and the Poynting vector with their application to reflection and refraction of waves through different media, Fresnel's formulae, Brewster's angles and the Zeeman effect.

Three lectures per week for one semester.

Prof. Marcou.

Ph. 281.   Quantum Mechanics, 1.

Mathematical preliminaries, Schrodinger wave mechanics applied to important systems.

Three lectures per week for one semester.

Prof. White.

Ph. 282.   Quantum Mechanics, II.

Continuation of Ph. 281, considering the momentum method, the Heisenberg matrix method, the Dirac symbolic method, the Pauli and Dirac theories of electron spin.

Three lectures per week for one semester.

Prof. White.

Ph. 271.   Seismology.

The theory and causes of earthquakes, the principles of the seismiograph, dynamics of seismic wave propagation.

Prof. O'Donnell, S.J.

Ph. 301.   Seminar.

A discussion of selected topics from Modern Physics.
One seminar per week for two semesters.

Physics Faculty

Ph. 303.   Thesis Work.

A research problem to determine and increase the ability of the student to do ORIGINAL work of an investigating nature. A formal problem will be assigned to the student by the department. Formal records must be accepted and conferences with the advisor are required.

Physics Faculty

RELIGION (Rl.)

*Professor*s Rev. Louis E. Sullivan, S.J.
Lecturers: Rev. James E. Coleran, S.J.
　　　　　　Rev. John J. Collins, S.J.
　　　　　　Rev. James E. Risk, S.J.

Courses of Instruction

Rl. 213.　Old Testament: The Prophetic Books.
　　A study of the Messianic Prophecies of the Old Testament.
　　　　　　　　　　　　　　　　　Prof. Coleran, S.J.

Rl. 217.　New Testament: Gospel of St. John.
　　A study of selected passages from the Gospel of St. John.
　　　　　　　　　　　　　　　　　Prof. Collins, S.J.

Rl. 223.　The Church of Christ.
　　An "historico-dogmatic" investigation of the foundation, constitutional structure and attributes of the religious society instituted by Christ. The historical method will be followed in the exposition of the traditional doctrines with a view to meeting the objections of Harnack, Sabatier, Loisy, and other modern Liberals from the History of Dogma. The course will also examine the current controversy between Catholics and Protestants in this Country on the relations between Church and State and the nature of religious freedom.
　　　　　　　　　　　　　　　　　Four semester hours.
　　　　　　　　　　　　　　　　　Prof. Sullivan, S.J.

Rl. 225.　Church and State.
　　A study of the Catholic theology of the Church with special reference to its implications for the relations of Church and State and the nature of religious freedom.　　Four semester hours.
　　Offered 1947-48.　　　　　　　　　*Prof*. Sullivan, S.J.

Rl. 243.　Theology of the Holy Eucharist.
　　This course will offer a complete presentation 1) of the dogmas of the Church on the Real Presence and the Eucharist as Sacrament and Sacrifice, 2) the theological explanation and defense of these dogmas, 3) some aspects of the Holy Eucharist, emphasized in the writings of the Fathers, but neglected in later centuries, 4) methods of incorporating these neglected aspects into sermons, text books and devotional literature.　　　　Four semester hours.
　　Fri., 4:30-6:15.　　　　　　　　　*Prof*. Sullivan, S.J.

Rl. 261.　Christian Morality.
　　The morality of human acts; principles of Christian morality, the moral virtues, the Commandments of God and the Church; obligations of professional men and women, businessmen and holders of public office.　　　　　　　　　Four semester hours.
　　　　　　　　　　　　　　　　　Prof. Risk, S.J.

ROMANCE LANGUAGES

Professor: JOSEPH D. GAUTHIER, S.J., *Chairman*

Associate Professor: ERNEST A. SICILIANO.

Lecturer: FRANCIS P. O'HARA

Courses of Instruction
FRENCH (Fr.)

Fr. 161. CONTEMPORARY FRENCH LITERATURE.

This course deals with the chief dramatic, narrative, and lyric literature of France from the beginning of the twentieth century to 1940. There will be lectures and discussions of the most representative literary productions of that period. *Conducted in French.*

<div align="right">Four semester hours.</div>

Fr. 163. MODERN CHRISTIAN REVIVAL IN FRENCH LITERATURE.

The Revival will be studied from its birth in the middle years of the nineteenth century up to the present, as represented by a selected group of typical writers in prose, drama, and lyrics. *Conducted in French.*

Mon., 4:30-6:15.   Six semester hours.
<div align="right">*Prof.* O'HARA.</div>

Fr. 201. HISTORY OF THE FRENCH LANGUAGE.

An introduction to the study of the formation of the language, evolution from the low Latin to modern French, transformations in the various centuries.

Wed., 4:30-6:15.   Six semester hours.
<div align="right">*Prof.* GAUTHIER, S.J.</div>

Fr. 211. FRENCH CIVILIZATION OF THE MIDDLE AGES.

A study of the transformations from the fall of the Roman Empire to the Reformation: social, economic, literary, artistic and religious influences which fashioned French civilization.

<div align="right">Six semester hours.
Prof. GAUTHIER, S.J.</div>

Fr. 213. French Literature of the Middle Ages.

Chansons de geste, fabliaux, lays of Marie de France, Roman de Renart.

Six semester hours.

Prof. Gauthier, S.J.

Fr. 221. French Literature of the Sixteenth Century.

The causes, character and progress of the Renaissance in France. The Pleiade and the transformation of the French lyric ideal; the birth of regular French tragedy; oratory, essay and satire. *Conducted in French.*

Offered 1947-48.

Six semester hours.

Prof. O'Hara.

Fr. 223. French Literature of the Seventeenth Century.

A course on the golden age of French literature. Among the subjects to be treated are: the Hotel de Rambouillet; the Academy; Jansenism and Port Royal; the critics; the classical tragedies and comedies; other literary forms; the quarrel between the ancients and the moderns. *Conducted in French.*

Offered 1947-48.

Six semester hours.

Prof. Siciliano.

Fr. 225. French Literature of the Eighteenth Century.

This course will treat of the social, philosophical, scientific and literary trends of the Century, with particular attention to the works of Montesquieu, Voltaire, Diderot, Marivaux, Rousseau and Beaumarchais. *Conducted in French.*

Four semester hours.

Fr. 227. French Literature of the Nineteenth Century.

The late Romantic period, the Realistic and symbolistic movements. Special attention will be given to the works of Musset, Mallarmé Moréas, H. de Regnier, Verhaen, Jammes and Claudel. *Conducted in French.*.

Fr. 229. Contemporary Prose Writers.

Mauriac, Maurois, Giono, Bazin, Bernanos, Gide, Hémon, Saint-Exupéry, Genevoix, Colette, Ghéon, Duhamel.

Fr. 241. French Lyric Poetry.

This course will include a discussion of lyric poetry and its laws, a survey of the canons of literary criticism, and a detailed study of the ode. Texts of the lyric poets from Charles d'Orléans to Paul Claudel will be studied. *Conducted in French.*

Sat., 9:00-10:45.   Six semester hours.

Prof. Gauthier, S.J.

Fr. 245. French Folklore.

An introduction to the study of folklore; tales, songs, proverbs, variations of folk-tales. A study of the more popular folk-tales.

Six semester hours.

Prof. Gauthier, S.J.

Fr. 301. French Seminar.

This seminar is required of students with a major in French. It is especially designed for guidance of the graduate student in establishing those principles of research and criticism that should actuate the student in his special field of investigation. The work is adapted to the needs of the individual student. *Conducted in French.*

By arrangement.   Four to six semester hours.

The Faculty.

SOCIOLOGY (Sc.)

Professor: REV. JOHN C. O'CONNELL, S.J. *Chairman*
Assistant Professor: REV. JOHN J. MORIARTY, S.J.
Lecturer: HELEN M. HEFFERNAN

Courses of Instruction

Sc. 105. SOCIAL PATHOLOGY.

The aim here is to provide a broad analytical survey of Society as affected by the fundamental irritants which profoundly influence modern social life. These adverse forces, viz., poverty, mental disease, juvenile delinquency, and crime, are carefully considered as to their cause, extent, trend, intensity, and mutual interaction. By proposal of cases, class discussions, etc., current concrete problems in relation to the various agencies and methods available for their protection are indicated.

Tues., 4:30-6:15.   Four semester hours
Prof. O'CONNELL, S.J.

Sc. 107. CRIMINOLOGY AND PENOLOGY.

This course deals with the causes, treatment, and prevention of criminality. Various theories of the etiology of crime will be critically discussed, including the views of outstanding modern schools. Penological and reformatory programs will be surveyed, also the reparative and preventive measures which aim at the moral, physical and social rehabilitation of criminals.

Mon., 4:30-6:15.   Four semester hours.
Prof. O'CONNELL, S.J.

Sc. 115. CULTURAL DYNAMICS.

This course presents an exposition of the forces which historically have plotted the curve of social development. Outstanding theories will be analysed in terms of motivation or cause, and the effects noted in such institutions as art, architecture, music, education, law and religion. Special emphasis on the unilateral economic causation of Karl Marx and on Sorokin's three-fold gradation.

Four semester hours.
Prof. O'CONNELL, S.J.

Sc. 123.   Public Health.

A critical analysis of the fundamental importance of health, both as an asset to the individual and as a factor in social welfare. The social significance of health and the nature of health problems are discussed. Consideration is given to social prophylaxis and therapeutics. The aspects of hygiene which aim at combating disease of social origin by means of palliative, curative and preventive measures are treated. The modern socio-health movement; constructive programs in public health work advanced by health organizations and agencies.

Wed., 6:30-8:15.   Four semester hours.

Miss Heffernan.

Sc. 125.   Social Implication in Mental Disorganization.

An analysis of the various types of mental maladjustment. A consideration of the contributing social factors in the etiology and treatment of mental disorders. Special attention will be given to mental hygiene and processes of rehabilitation. This course is of value to teachers, social workers and nurses.

Offered 1947-48.   Four semester hours.

Miss Heffernan.

Sc. 161.   Sociology of Political Institutions.

An analysis of social science in its political implications beginning with the Socratic influence and extending through the Christian era to the seventeenth century. Concepts are evaluated against the framework of the Christian state.

Four semester hours.
Prof. O'Connell, S.J.

Sc. 171.   Rural-Urban Sociology.

A survey of two great population masses in terms of their natures, chief characteristics, dynamics, mutual interaction and general formative influence upon individuals and groups. Agricultural problems are considered especially as they supply cultural and functional connections between rural and urban communities.

Offered 1947-48.   Four semester hours.
Prof. O'Connell, S.J.

Sc. 181. SOCIAL ETHICS.

A comparative analysis of contemporary social mores, trends and attitudes. The significance and evaluation of conduct by the individual, family and community as affected by conditioning influences of ethical codes. This course should be of interest particularly to nurses, teachers, social workers and all who feel the need of guidance in matters involving professional secrets, morality of procedures, and the like.

Four semester hours.

Prof. O'CONNELL, S.J.

Sc. 201. SOCIOLOGY OF THE FAMILY.

This course introduces a rapid sketch of the family as it appears historically in different fundamental types. The main treatment will center upon the modern family as a societal unit, considering its origin, nature and purpose; prevalent trends which militate for or against family solidarity and effectiveness; a survey, as to content and value, of current analyses of recognized domestic problems, as for example, marriage, divorce, birth limitation, etc.

Offered 1947-48.   Four semester hours.

Prof. O'CONNELL, S.J.

Sc. 209. GENESIS OF TOTALITARIAN SOCIOLOGY.

A genetic survey of totalitarian trends from the seventeenth century to the present time. Basic principles of modern ideologies, e.g. Nazism, Fascism, and Communism, are indicated and developed from authors representative of the different cultural periods. Emphasis will be put upon the relevant concepts of such social scholars as Hobbes, Rousseau, and Marx.

Offered 1947-48.   Four semester hours.

Prof. O'CONNELL, S.J.

Sc. 221. SOCIAL PROBLEMS.

In this course attention is focused on many problems which seem certain to appear with new or revived force in the immediate future. Unemployment, the value and direction of social controls, group insurance—indicate the nature of the course program.

Fri., 4:30-6:15.   Four semester hours.

Prof. O'CONNELL, S.J.

Sc. 223.   MODERN SOCIOLOGICAL CRISES.

Contemporary institutional readjustments: a study of the aspirations and conflicts of interests between the labor, farm, industry, and commercial groups in the United States; the possible international implications.

Offered 1947-48.   Four semester hours.

Prof. MORIARTY, S.J.

Sc. 225.   HISTORY OF SOCIAL THOUGHT.

Development of ideologies prior to 1850.   A survey of noteworthy social philosophers representative of various periods, evaluated as to content and influence.   Extended analysis of individual thinkers or systems.   This course provides a fitting background for a more detailed study of Sociology from Comte to the present time.

Thurs., 4:30-6:15.   Four semester hours.

Prof. MORIARTY, S.J.

Sc. 231.   SOCIOLOGY OF RELIGION.

A comparative study of factors based on religion which supplied objectives in the Grecian, Roman and pre-Christian cultures. This course extends through the early Christian period. Attention is concentrated on the social, economic and political patterns as modified by the religious dynamic.

Two semester hours.

Prof. O'CONNELL, S.J.

Sc. 301.   SEMINAR

Primarily of interest to students who have taken Sc. 31 or its equivalent. The program is made up almost entirely of round table discussions. Short theses are prepared, read and discussed by the class members. In addition there are occasional lectures by the professor or guest-speakers prominent in their special field of social action.

Time to be arranged.   Four semester hours.

Prof. O'CONNELL, S.J.

SCHEDULE OF CLASSES 1948-49

Classical Languages:

T	Cicero; Philosophical Essays	4	Prof. McCauley, S.J.
S	Correspondence of Cicero	4	Prof. McCauley, S.J.

Education:

M	Experimental Ed. Psychology	6	Prof. Curtin
	Prob. of Soc. Psych. in Ed. (1st sem.)	2	Prof. Nowlan, S.J.
	Educational Sociology (2nd sem.)	2	Prof. Nowlan, S.J.
T	Philosophy of Education (1st sem.)	2	Prof. Donovan, S.J.
	Problems in Ed. Philosophy (2nd sem.)	2	Prof. Donovan, S.J.
W	Classroom Methods	2	Mr. Butler
	Mental Hygiene	4	Prof. Moynihan, S.J.
	Seminar: Ed. Psychology (2nd sem.)	2	Prof. Curtin
Th	Methodology and Research	2	Prof. Donovan, S.J.
	Tests and Measurements (1st sem.)	2	Prof. Curtin
	Psychometrics (2nd sem.)	2	Prof. Curtin
	Legal Aspects of Pub. Sch. Admin.	4	Prof. O'Keefe
F	Ed. of Exceptional Children	4	Prof. McKeon
	General Sch. Administration (1st sem.)	2	Prof. Welch
	Prob. in Mod. Sch. Admin. (2nd sem.)	2	Prof. Welch
S	Elementary Ed. Statistics	4	Prof. Curtin
	Supervision in Elem. Grades (1st sem.)	2	Sister M. Josephina, S.S.J.
	Pupil, Teacher in Elem. Sch. (2nd sem.)	2	Sister M. Josephina, S.S.J.
	Principles of Guidance	4	Prof. Moynihan, S.J.
	Improvement in Reading	4	Prof. McKeon
	Workshop in Test Construction	4	Prof. Curtin

English:

M	Chaucer	4	Prof. Hirsh
	Victorian Prose	4	Prof. O'Callaghan, S.J.
T	Shakespeare	4	Prof. Johnson S.J.
W	Drama to 1642	4	Prof. Johnson S.J.
	Milton	4	Prof. Hirsh
Th	Shakespeare: Seminar	4	Prof. Johnson S.J.
	Romantic Movement	4	Prof. Walker
F	Seventeenth Century	4	Prof. Bernhardt, S.J.
S	English Prose: 1603-1727	4	Prof. Johnson S.J.
	Age of Johnson	4	Prof. Hirsh
	Bibliography and Method	2	Prof. Johnson, S.J.

Numbers indicate semester hours.

Gaelic:

| M | Ancient Gaelic Literature | 4 Prof. Murphy S.J. |
| W | Gaelic Literature, 1600-1940 | 4 Prof. Murphy S.J. |

History and Government:

M	National Expansion	6 Prof. Grattan
T	Mediaeval Civilization	4 Prof. Cox
WF	Science and Method	6 Prof. Burke, S.J.
Th	Contemporary World History	4 Prof. Mahoney
S	Contemporary U. S. History	6 Prof. Burke, S.J.
	Thesis Seminar (By arrangement)	Prof. Burke, S.J.

Mathematics:

MW	Differential Geometry	6 Prof.Marcou
TTh	Complex Variables	6 Prof. O'Donnell, S.J.
F	Real Variable	6 Prof. O'Donnell, S.J.
S	Laplace Transform	4 Prof. Marcou
	Seminar (By arrangement)	

Philosophy:

M	Mediaeval Philosophy (1st sem.)	2 Prof. O'Brien, S.J.
	Social Philosophy (2nd sem.)	2 Prof. O'Brien, S.J.
T	St. Thomas	4 Prof. McCarthy, S.J.
Th	Modern Philosophy	4 Prof. Duncan, S.J.
F	Philosophy & Modern Science	4 Prof. Kelly, S.J.
S	St. Augustine	4 Prof. Maluf
	Readings and Research (By arrangement)	Prof. O'Brien, S.J.

Religion:

| F | Theology of the Holy Eucharist | 4 Prof. Sullivan, S.J. |

Romance Languages:

M	Mod. Xtian Revival in Fr. Lit.	6 Prof. O'Hara
W	History of French Language	6 Prof. Gauthier, S.J.
S	French Lyric Poetry	6 Prof. Gauthier, S.J.

Sociology:

M	Criminology & Penology	4 Prof. O'Connell, S.J.
T	Social Pathology	4 Prof. O'Connell, S.J.
W	Public Health	4 Miss Heffernan
Th	History of Social Thought	4 Prof. Moriarty
F	Social Problems	4 Prof. O'Connell, S.J

Science:

	Biology (By arrangement)	
	Chemistry (By arrangement)	
	Physics (By arrangement)	

Numbers indicate semester hours.

BOSTON COLLEGE

GENERAL DIRECTORY

1948 - 1949

◆

WILLIAM L. KELEHER, S.J.
President
University Heights, Chestnut Hill 67, Mass.

THE COLLEGE OF ARTS AND SCIENCES
University Heights, Chestnut Hill 67, Mass.
ERNEST B. FOLEY, S.J., *Dean*

THE GRADUATE SCHOOL OF ARTS AND SCIENCES
University Heights, Chestnut Hill 67, Mass.
GEORGE A. O'DONNELL, S.J., *Dean*

THE SCHOOL OF BUSINESS ADMINISTRATION
University Heights, Chestnut Hill 67, Mass.
JAMES J. KELLEY, S.J., *Dean*

THE COLLEGE OF ARTS AND SCIENCES INTOWN
126 Newbury Street, Boston 16, Mass.
JOHN W. RYAN, S.J., *Dean*

THE SUMMER SESSION
University Heights, Chestnut Hill 67, Mass.
JAMES L. BURKE, S.J., *Director*

THE LAW SCHOOL
18 Tremont Street, Boston 8, Mass.
WILLIAM J. KENEALY, S.J., *Dean*

THE SCHOOL OF SOCIAL WORK
126 Newbury Street, Boston 16, Mass.
DOROTHY L. BOOK, *Dean*

THE INSTITUTE OF ADULT EDUCATION
126 Newbury Street, Boston 16, Mass.
JOHN W. RYAN, S.J., *Director*

SCHOOL OF NURSING
126 Newbury Street, Boston 16, Mass.
ANTHONY G. CARROLL, S.J., *Regent*

THE COLLEGE OF LIBERAL ARTS IN LENOX
Shadowbrook, Lenox, Mass.
WILLIAM J. MURPHY, S.J., *Dean*

THE SCHOOL OF PHILOSOPHY AND SCIENCE
Concord Road, Weston 93, Mass.
JOSEPH F. MacDONNELL, S.J., *Dean*

THE SCHOOL OF THEOLOGY
Concord Road, Weston 93, Mass.
JOHN P. HARAN, S.J., *Dean*